

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

RASMUSSEN INSTRUMENTS, LLC,)	
)	
Plaintiff,)	
)	
v.)	CIVIL ACTION
)	NO. 20-11807-WGY
DEPUY SYNTHES PRODUCTS, INC.,)	
DEPUY SYNTHES SALES, INC.,)	
and MEDICAL DEVICE BUSINESS)	
SERVICES, INC.,)	
Defendants.)	

YOUNG, D.J.

October 26, 2021

MEMORANDUM & ORDER

The plaintiff Rasmussen Instruments, LLC ("Rasmussen") and the defendants DePuy Synthes Products, Inc., DePuy Synthes Sales, Inc., and Medical Device Business Services, Inc. (collectively, "DePuy") ask this Court to determine whether certain claim terms of United States Patent No. 9,492,180 (the "'180 Patent") and United States Patent No. 10,517,583 (the "'583 Patent") are means-plus-function terms pursuant to 35 U.S.C. § 112, ¶ 6. This Court answers that question in the negative.

The parties also ask this Court to construe certain claim terms pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). This Court sets forth its constructions infra Section IV.

I. INTRODUCTION

In 2005, orthopedic surgeon Dr. Gary Lynn Rasmussen ("Dr. Rasmussen") filed a provisional patent application for his "minimally-invasive or reduced-invasive instrumentation for guiding resection that uses the ligamentous structure of the knee to guide placement of the instrumentation and the resulting optimal alignment and physiological positioning of the knee prosthesis." First Am. Compl. Patent Infringement ("Am. Compl.") ¶¶ 2, 18-19, ECF No. 31. Seeking to license his intellectual property, Dr. Rasmussen met and negotiated with representatives of DePuy. Id. ¶¶ 21-28. Negotiations broke down in 2014, and no license issued. Id. ¶ 28.

In November 2016, the United States Patent and Trademark Office issued the '180 Patent to Dr. Rasmussen. Id. ¶ 11; see generally Decl. Joy B. Kete Supp. Rasmussen Instruments, LLC's Opening Claim Construction Br. ("Kete Decl."), Ex. A, United States Patent No. 9,492,180 ("'180 Patent"), ECF No. 44-1. Three years later, the United States Patent and Trademark Office issued the '583 Patent to Dr. Rasmussen. Am. Compl. ¶ 12; see generally Kete Decl., Ex. B, United States Patent No. 10,517,583 ("'583 Patent"), ECF No. 44-2. Dr. Rasmussen then assigned the '180 Patent and '583 Patent to Rasmussen, a limited liability company that he had formed. Am. Compl. ¶¶ 1-2, 11-12.

In January 2021, Rasmussen filed the operative complaint against DePuy for patent infringement. See generally id. DePuy filed an answer and affirmative defenses the following month. See generally Defs.' Answer & Affirmative Defenses Pl.'s First Am. Compl., ECF No. 34. DePuy filed an unopposed motion to increase the number of claim terms for construction, Defs.' Unopposed Mot. Increase Number Claim Terms Construction (to 19) & Increase Page Limit Claim Construction Brs. (to 25), ECF No. 39, which this Court allowed, Electronic Order (Apr. 23, 2021), ECF No. 41. The parties subsequently filed a joint claim construction statement and briefs in support of their proposed constructions. See generally Joint Claim Construction Statement Pursuant L.R. 16.6(e)(1)(D) ("First Statement"), ECF No. 40; Pl. Rasmussen Instruments, LLC's Opening Claim Construction Br. ("Pl.'s Br."), ECF No. 42; Defs.' Opening Claim Construction Br. ("Defs.' Br."), ECF No. 43; Pl. Rasmussen Instruments, LLC's Resp. Claim Construction Br., ECF No. 55; Defs.' Resp. Claim Construction Br. ("Defs.' Resp."), ECF No. 56.

This Court held a Markman hearing on July 29, 2021. See generally Tr. Markman Hr'g, ECF No. 74. This Court tentatively ruled at the hearing that DePuy had failed to sustain its burden of demonstrating that the disputed claim terms are means-plus-function terms. Id. 23-24. This Court ordered the parties to file a joint supplemental claim construction statement and

supplemental briefs setting out their proposed plain-and-ordinary meaning constructions. Id. 24-28; see generally Pl. Rasmussen Instruments, LLC's Suppl. Claim Construction Br. ("Pl.'s Suppl. Br."), ECF No. 81; Defs.' Suppl. Claim Construction Br. ("Defs.' Suppl. Br."), ECF No. 82; Defs.' Suppl. Br., Ex. 2, Suppl. Claim Construction Chart ("Second Statement"), ECF No. 82-2; Defs.' Suppl. Resp. Claim Construction Br., ECF No. 86; Pl.'s Suppl. Resp. Claim Construction Br., ECF No. 93.

II. LEGAL STANDARDS

A. Means-Plus-Function Principles

Section 112, ¶ 6 of title 35 of the United States Code "applies only to purely functional limitations that do not provide the structure that performs the recited function." Phillips v. AWH Corp., 415 F.3d 1303, 1311 (Fed. Cir. 2005) (en banc); see MPEP 2173.05(g) (9th ed. Rev. 10.2019, June 2020) ("A claim term is functional when it recites a feature by what it does rather than by what it is" (quotations omitted)). Section 112, ¶ 6 provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6 (2006 ed.).¹ “In enacting this provision, Congress struck a balance in allowing patentees to express a claim limitation by reciting a function to be performed rather than by reciting structure for performing that function, while placing specific constraints on how such a limitation is to be construed” Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1347 (Fed. Cir. 2015) (en banc). Specifically, “in return for generic claiming ability, the applicant must indicate in the specification what structure constitutes the means.” Biomedino, LLC v. Waters Techs. Corp., 490 F.3d 946, 948 (Fed. Cir. 2007).

The inclusion of the word “means” in a term creates a presumption that section 112, ¶ 6 applies, and the absence of the word “means” in a term creates a presumption that section 112, ¶ 6 does not apply. Williamson, 792 F.3d at 1349. The party seeking to rebut this presumption must demonstrate by a preponderance of the evidence “that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” Id. (quotations omitted); Advanced Ground Info.

¹ Section 112 was amended and its subsections were renamed by the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284, which took effect on September 16, 2012. Because the applications resulting in the '180 Patent and '583 Patent were filed before that date, this Court refers to the pre-amendment version of section 112. See Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 902 n.1 (2014).

Sys., Inc. v. Life360, Inc., 830 F.3d 1341, 1347 (Fed. Cir. 2016); see Linear Tech. Corp. v. Impala Linear Corp., 379 F.3d 1311, 1319-20 (Fed. Cir. 2004) (holding that a patentee has no burden to prove that a term recites structure). This determination is based not on the disputed terms "in isolation," MTD Prods. Inc. v. Iancu, 933 F.3d 1336, 1342 (Fed. Cir. 2019), but rather, "under the traditional claim construction principles, on an element-by-element basis, and in light of evidence intrinsic and extrinsic to the asserted patents," Zeroclick, LLC v. Apple Inc., 891 F.3d 1003, 1007 (Fed. Cir. 2018).

In so determining, this Court may "review[] various sources, such as the claims themselves, the specification, the prosecution history, dictionaries, and any other relevant evidence." Ruckus Wireless, Inc. v. Innovative Wireless Sols., LLC, 824 F.3d 999, 1002-03 (Fed. Cir. 2016). Arguments and conclusory language unsupported by record evidence do not rebut the presumption. Zeroclick, 891 F.3d at 1007-08. Moreover, "the mere fact that the disputed limitations incorporate functional language does not automatically convert the words into means for performing such functions." Id. at 1008.

B. Customary Claim Construction Principles

Where section 112, ¶ 6 does not apply, Federal Circuit "precedent for the construction of limitations that are not

means-plus-function limitations is applied in the customary way.” Watts v. XL Sys., Inc., 232 F.3d 877, 881 (Fed. Cir. 2000). In these customary claim construction proceedings, “[t]he words of a claim are generally given their ordinary and customary meaning, which is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” Ruckus, 824 F.3d at 1002 (quotations omitted). “There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” Thorner v. Sony Comput. Ent. Am. LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012). The standards for both exceptions are “exacting.” See id. at 1365-66.

“In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” Phillips, 415 F.3d at 1314 (citing Brown v. 3M, 265 F.3d 1349, 1352 (Fed. Cir. 2001) (stating that terms which “are not technical terms of art . . . do not require elaborate interpretation”)). A term needs no construction when “the plain and ordinary meaning of

the disputed claim language is clear.” Summit 6, LLC v. Samsung Elecs. Co., 802 F.3d 1283, 1291 (Fed. Cir. 2015).

In other cases, however, “[a] determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.” O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1361 (Fed. Cir. 2008); see Kaneka Corp. v. Xiamen Kingdomway Grp. Co., 790 F.3d 1298, 1304 (Fed. Cir. 2015) (recognizing that a term “may have more than one plain and ordinary meaning”); Goldenberg v. Cytogen, Inc., 373 F.3d 1158, 1164 (Fed. Cir. 2004) (recognizing that a term may have “no ordinary and customary meaning”). Thus, where the parties dispute the plain and ordinary meaning of a term, a court cannot instruct the jury to give the term its plain and ordinary meaning. See Eon Corp. IP Holdings v. Silver Spring Networks, 815 F.3d 1314, 1319 (Fed. Cir. 2016). Rather, the court must construe the term’s plain and ordinary meaning. NobelBiz, Inc. v. Glob. Connect, L.L.C., 701 F. App’x 994, 997 (Fed. Cir. 2017); see AFG Indus., Inc. v. Cardinal IG Co., 239 F.3d 1239, 1247 (Fed. Cir. 2001) (“It is critical for trial courts to set forth an express construction of the material claim terms in dispute.”); Sulzer Textil A.G. v. Picanol N.V., 358 F.3d 1356, 1366 (Fed. Cir. 2004) (“[T]he district court must

instruct the jury on the meanings to be attributed to all disputed terms used in the claims in suit so that the jury will be able to intelligently determine the questions presented.” (quotations omitted)). To do otherwise would be to “invite the jury to . . . decide the meaning of a particular claim term” in violation of Markman. Verizon Servs. Corp. v. Cox Fibernet Va., Inc., 602 F.3d 1325, 1334 (Fed. Cir. 2010).

In determining the plain and ordinary meaning of a term, courts “first look to, and primarily rely on, the intrinsic evidence, including the claims themselves, the specification, and the prosecution history of the patent, which is usually dispositive.” Personalized Media Commc’ns, LLC v. Apple Inc., 952 F.3d 1336, 1340 (Fed. Cir. 2020) (quotations omitted). Although the specification “is the single best guide to the meaning of a disputed term,” it is improper to import limitations from the specification, such as the embodiments described there. Phillips, 415 F.3d at 1315, 1323–27. The language of “[o]ther claims of the patent in question, both asserted and unasserted,” can “illuminate the meaning of the same term in other claims” because “claim terms are normally used consistently throughout the patent” Id. at 1314. “Differences among claims can also be a useful guide in understanding the meaning of particular claim terms.” Id. “For example, the presence of a dependent claim that adds a

particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” Id. at 1314-15.

Extrinsic evidence, although “less significant” and “less reliable” than intrinsic evidence, likewise “can shed useful light on the relevant art.” Id. at 1317, 1318 (quotations omitted). Because dictionaries and treatises “endeavor to collect the accepted meanings of terms used in various fields of science and technology, those resources have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention.” Id. at 1318. In all events, courts cannot rely on extrinsic evidence that contradicts the intrinsic record. Id. at 1324.

III. ANALYSIS

This Court pauses to make two important points. First, regarding DePuy’s means-plus-function challenges, none of the disputed terms include the word “means,” so section 112, ¶ 6 presumptively does not apply. See Williamson, 792 F.3d at 1349. DePuy, in turn, bears the burden of demonstrating by a preponderance of the evidence “that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” See id. (quotations omitted); Life360, 830 F.3d at

1347. Rasmussen bears no burden in this regard. See Linear, 379 F.3d at 1319-20.

Second, in its "customary" claim construction analyses, this Court will give each disputed term its plain and ordinary meaning. DePuy pursues neither patentee-as-lexicographer nor disavowal, the "only two exceptions" to the general applicability of the plain-and-ordinary-meaning rule, and this Court discerns no basis for the application of either exception.² See Thorner, 669 F.3d at 1365.

A. "tibial component," "second member," and "tibial contact member"

The parties agree that this Court ought give only one construction for "tibial component," "second member," and "tibial contact member." Second Statement 1. This Court therefore refers to these terms collectively as the "tibial component."

DePuy argues that section 112, ¶ 6 applies. First Statement A-1 to A-4. DePuy contends that if the statute does not apply, tibial component means "tibial plate with central opening." Second Statement 1. Rasmussen responds that section 112, ¶ 6 does not apply, First Statement A-1 to A-4, and that tibial component means "member, component, or structural unit

² This Court does not interpret DePuy's cursory citations to be a late-stage attempt to pursue either exception. See, e.g., Defs.' Suppl. Br. 5; see also Pl.'s Suppl. Br. 2 & nn.1-2.

for positioning at a tibia,” Second Statement 1. This Court rules that section 112, ¶ 6 does not apply, and it construes tibial component as “component configured to be seated on, at, or against a portion or proximal portion of a tibia.”

1. Means-Plus-Function

The intrinsic and extrinsic records recite sufficient structure for the tibial component. Claim language reveals that the tibial component, second member, and tibial contact member are structural units of a larger “device” or “assembly” (in the case of the ‘180 Patent) or “apparatus” (in the case of the ‘583 Patent) which comprises them. See ‘180 Patent col. 22, ll. 57-67, col. 23, ll. 1-3 (claim 1), col. 23, ll. 10-14 (claim 3), col. 23, ll. 24-28 (claim 7), col. 23, ll. 29-37 (claim 8), col. 23, ll. 38-53 (claim 9), col. 24, ll. 10-27 (claim 15), col. 24, ll. 34-45 (claim 17), col. 24, ll. 53-67, col. 25, ll. 1-5 (claim 19), col. 25, ll. 15-21, col. 26, ll. 1-10 (claim 22), col. 26, ll. 11-16 (claim 23); ‘583 Patent col. 22, ll. 60-67, col. 23, ll. 1-7 (claim 1), col. 23, ll. 14-21 (claim 3), col. 23, ll. 26-31 (claim 5), col. 23, ll. 38-51 (claim 7), col. 23, ll. 52-57 (claim 8), col. 24, ll. 4-15 (claim 11), col. 24, ll. 16-39 (claim 12), col. 24, ll. 40-45 (claim 13), col. 24, ll.

46-53 (claim 14), col. 24, ll. 65-67, col. 25, ll. 1-2 (claim 17).

The specifications likewise recite structure. They teach, for instance, the "placement of the tibial component" and the fact that "[t]he knee implant 200 generally comprises a femoral component 202 and a tibial component 204." See '180 Patent col. 21, ll. 21-23 (citing figs. 49-50); '583 Patent col. 21, ll. 26-28 (same). The specifications also explain that "[t]he present invention meets the . . . needs" of the prior art by providing "a reference point for accurately positioning the tibial and femoral components of the knee implant, in particular when said structure is in tensed or otherwise loaded condition." '180 Patent col. 1, ll. 63-66, col. 2, l. 26; '583 Patent col. 2, ll. 1-5, 32.

DePuy's own briefing includes references to intrinsic and extrinsic evidence which indicate that the tibial component recites sufficient structure. On the first page of its opening brief, for example, DePuy uses arrows to point to structural details of figure 51 of the '180 patent, highlighting the "Tibial Components" in blue. Defs.' Br. 1. DePuy goes on to describe what is "commonly called a 'tibial component.'" Id. (emphasis added). In its responsive brief, DePuy again uses arrows to point to what it labeled a "Tibial component" in a petition for inter partes review of a different patent. Defs.'

Resp. 2; see Decl. Jacob B. Pecht Supp. Rasmussen Instruments, LLC's Suppl. Claim Construction Br. ("Pecht Decl."), Ex. C, Pet. Inter Partes Review 37 C.F.R. § 42.100 6, ECF No. 83-3. DePuy's highlighting and explanations indicate that tibial component is "used in common parlance or by persons of skill in the pertinent art to designate structure" See Iancu, 933 F.3d at 1341 (quotations omitted); see also, e.g., 21 C.F.R. § 888.3510 (United States Food and Drug Administration discussing "tibial component"); Howmedica Osteonics Corp. v. Wright Med. Tech., Inc., 540 F.3d 1337, 1340 (Fed. Cir. 2008) (discussing "tibial component"); Zimmer Tech., Inc. v. Howmedica Osteonics Corp., 453 F. Supp. 2d 1030, 1053 (N.D. Ind. 2006) (same); Regents of Univ. of Cal. v. Howmedica, Inc., 530 F. Supp. 846, 855 (D.N.J. 1981) (same); Pecht Decl., Ex. D, U.S. Patent No. 5669914A, ECF No. 83-4 (same); Pecht Decl., Ex. E, U.S. Patent No. 4945904A, ECF No. 83-5 (same); Pl.'s Suppl. Br. 19 n.25 (collecting patents reciting "tibial component").

For extrinsic support, DePuy cites a blog post from 2016. Defs.' Br. 14 & n.2. Like DePuy's highlighting, however, this blog post indicates that the tibial component connotes structure. The blog post explains that "tibial component" refers to "[t]he flat part that attaches to the top of the resurfaced shin bone at the front of the leg (tibia)." See Grace McClure & Dr. Trevor North, Different Types of Knee

Replacement Implants, PeerWell (Oct. 3, 2016),
<https://peerwell.co/blog/different-types-of-knee-replacement-implants>.

Finally, DePuy takes aim at “component,” “configured to,” and locational language in these claim terms, arguing that such language does not connote structure. Defs.’ Br. 7 (citing Diebold Nixdorf, Inc. v. Int’l Trade Comm’n, 899 F.3d 1291, 1298 (Fed. Cir. 2018) (holding that section 112, ¶ 6 applied where “the claims describe the term . . . solely in relation to its function and location in the apparatus”); Cypress Lake Software, Inc. v. ZTE (USA) Inc., Case No. 17-CV-00300-RWS, 2018 WL 4035968, at *14 (E.D. Tex. Aug. 23, 2018) (ruling that “the functional modifier . . . ‘component’” did “not connote structure”)); Defs.’ Resp. 6-8 (citing Rain Computing, Inc. v. Samsung Elecs. Am., Inc., 989 F.3d 1002, 1006 (Fed. Cir. 2021) (holding that “a user identification module configured to control access of” was no more structural than “a user identification module for accessing”)). Rasmussen, for its part, contends that “courts have routinely held that section 112, ¶ 6 does not apply to claims that recite ‘configured to’ or other similar language.” Pls.’ Br. 5 (citing Huawei Techs. Co. Ltd. v. Verizon Commc’ns, Inc., Case No. 20-00030-JRG, 2021 WL 150442, at *12 (E.D. Tex. Jan. 15, 2021) (ruling that “unit

configured to" and "subunit configured to" recite sufficient structure)).

DePuy misses the mark for two reasons. First, even if "component," "configured to," and locational language do not connote structure, and indeed connote function, "the mere fact that the disputed limitations incorporate functional language does not automatically convert the words into means for performing such functions." See Zeroclick, 891 F.3d at 1008. Second, the issue is not whether such language, standing alone, connotes structure or instead connotes function. See Iancu, 933 F.3d at 1342 (explaining that the section 112, ¶ 6 inquiry extends beyond the consideration of the disputed terms "in isolation"). Rather, the issue is whether a person of ordinary skill in the art, reading the entire intrinsic and extrinsic record in light of the presumption that flows from Rasmussen's decision not to include the word "means," would "understand the claim language to refer to structure" See Samsung, 948 F.3d at 1354. To turn a phrase from DePuy's briefing, here it is "the detailed structure provided elsewhere in the claims" that prevents the application of section 112, ¶ 6. See Defs.' Resp. 7.

2. Construction

This Court construes "tibial component" as "component configured to be seated on, at, or against a portion or proximal portion of a tibia."

This Court rejects DePuy's proposal. First, a person of ordinary skill in the art might well understand a "tibial plate" to refer to a different invention. See, e.g., Tibia Fractures, DePuy Synthes, <https://www.jnjmedicaldevices.com/en-US/procedure/tibia-fractures> (last visited Oct. 26, 2021) (listing seven different types of "tibia plates," none of which resemble a tibial component). Second, there is no basis to add the limitation "with central opening" because neither the intrinsic nor extrinsic record indicates that the tibial component must have an opening, let alone a "central opening."³ See generally '180 Patent; '583 Patent. For example, figures 49 and 50, which depict "tibial component 204," do not show any opening at all. See '180 Patent figs. 49-50.

The specifications teach the following: "A combination of a first assembly for guiding resection of a femur and tibia of a knee joint and a second assembly including femoral and tibial

³ The specifications do teach a "central opening" and "centrally located opening," but only with respect to the "femoral mount," "hex-head bolt," and "base member" -- never the "tibial component." See, e.g., '180 Patent col. 3, ll. 4-6 (femoral mount), col. 8, ll. 23-34 (same), col. 15, ll. 50-54 (hex-head bolt), col. 17, ll. 55-58 (base member).

knee components. The combination of the first assembly and the second assembly provides optimal placement and positioning of the femoral and tibial knee components to achieve near-normal knee kinematics and tension," '180 Patent (Abstract); '583 Patent (Abstract); "Preservation of the ligamentous and other soft tissue structures around the knee can provide a reference point for accurately positioning the tibial and femoral components of the knee implant, in particular when said structure is in tensed or otherwise loaded condition," '180 Patent col. 1, ll. 62-66; '583 Patent col. 2, ll. 1-5; "The present invention meets the above needs, and achieves other advantages, by providing an assembly for guiding resection of a femur and tibia of a knee joint in preparation for installing femoral and tibial knee components," '180 Patent col. 2, ll. 26-30; '583 Patent col. 2, ll. 32-36; "the use of the flexion bolt in flexion and the extension bolt in extension, combined with the other components of the tensioning assembly, allow the tibia and femur to be distracted under a matching amount of tension in flexion and extension to ensure a better fit for the tibial and femoral knee replacement components throughout a range of flexion," '180 Patent col. 5, ll. 27-33; '583 Patent col. 5, ll. 36-42; "An assembly 10 of the present invention for facilitating preparation of a knee joint, including guiding positioning of cuts to a femur 11 and tibia 12 of the knee joint, for later

mating with femoral and tibial knee replacement components, is shown in the accompanying figures," '180 Patent col. 7, ll. 41-45; '583 Patent col. 7, ll. 50-54; "Defined on the outer cylindrical surface of the femoral mount 15 is a plurality of longitudinally extending gauge marks 21 that aid in positioning of the tibial and femoral components," '180 Patent col. 8, ll. 34-37; '583 Patent col. 8, ll. 43-46; "The use of the bolts 30 and 96 or 105 and the tibial angulation guide 74 or valgus adapter member 110 allow the tibia and femur to be distracted under a matching amount of torque in flexion and extension to ensure a better fit for the tibial and femoral knee replacement components throughout a range of flexion," '180 Patent col. 16, ll. 34-39; '583 Patent col. 16, ll. 41-46; an embodiment involving the displacement of "the tibia forward or anterior to allow exposure for placement of the tibial component," '180 Patent col. 16, ll. 49-51; '583 Patent col. 16, ll. 56-58; and "The knee implant 200 generally comprises a femoral component 202 and a tibial component 204," '180 Patent col. 21, ll. 21-23 (citing figs. 49-50); '583 Patent col. 21, ll. 26-28 (same).

This Court must read the claims in light of these teachings. See Phillips, 415 F.3d at 1323. In each independent claim reciting tibial component, a tibial component is "configured to be seated" on, at, or against a portion or proximal portion of a tibia. See '180 Patent col. 22, ll. 57-

67, col. 23, ll. 1-3 (claim 1), col. 23, ll. 38-53 (claim 9), col. 24, ll. 10-27 (claim 15), col. 24, ll. 53-67, col. 25, ll. 1-5 (claim 19), col. 25, ll. 15-21, col. 26, ll. 1-10 (claim 22). In each dependent claim reciting tibial component, a tibial component is adjusted in relation to the femoral component or seated in the knee joint while a threaded member may articulate with it. See id. col. 23, ll. 10-14 (claim 3), col. 23, ll. 24-28 (claim 7), col. 23, ll. 29-37 (claim 8), col. 24, ll. 34-45 (claim 17), col. 26, ll. 11-16 (claim 23). No more is exigible to understand the plain and ordinary meaning of tibial component. See, e.g., Hill-Rom Servs., Inc. v. Stryker Corp., 755 F.3d 1367, 1376-77 (Fed. Cir. 2014).

Accordingly, this Court construes "tibial component" as "component configured to be seated on, at, or against a portion or proximal portion of a tibia."

B. "femoral component," "femoral element," "first member," and "elongated member"

The parties agree that this Court ought give only one construction for "femoral component," "femoral element," "first member," and "elongated member."⁴ Second Statement 1-2. This

⁴ This Court recognizes that with respect to "femoral component," "femoral element," and "first member," Rasmussen proposes "member, component, or structural unit for positioning at a femur," but with respect to "elongated member" Rasmussen proposes "elongated member, component, or structural unit for positioning at a femur." Second Statement 1-2 (emphasis added). In light of DePuy's agreement that "all the things the

Court therefore refers to these terms collectively as the "femoral component."

DePuy argues that section 112, ¶ 6 applies. First Statement A-1 to A-4. DePuy contends that if the statute does not apply, femoral component means "femoral intramedullary rod." Second Statement 1. Rasmussen responds that section 112, ¶ 6 does not apply, First Statement A-5 to A-10, and that femoral component means "member, component, or structural unit for positioning at a femur," Second Statement 1. This Court rules that section 112, ¶ 6 does not apply, and it construes femoral component as "component configured to extend into a femur when seated in the femur or at a distal portion of the femur."

1. Means-Plus-Function

DePuy fails to rebut the presumption that femoral component is outside the scope of section 112, ¶ 6. Both the '180 Patent and the '583 Patent repeatedly describe the femoral component in structural terms.

The specifications teach the following: "A combination of a first assembly for guiding resection of a femur and tibia of a knee joint and a second assembly including femoral and tibial knee components. The combination of the first assembly and the

specification describes as meeting the femoral-related limitations" are "'elongated,'" Defs.' Suppl. Br. 11 n.2, this Court discerns no reason to give elongated member a different construction.

second assembly provides optimal placement and positioning of the femoral and tibial knee components to achieve near-normal knee kinematics and tension," '180 Patent (Abstract); '583 Patent (Abstract); "Preservation of the ligamentous and other soft tissue structures around the knee can provide a reference point for accurately positioning the tibial and femoral components of the knee implant, in particular when said structure is in tensed or otherwise loaded condition," '180 Patent col. 1, ll. 62-66; '583 Patent col. 2, ll. 1-5; "The present invention meets the above needs, and achieves other advantages, by providing an assembly for guiding resection of a femur and tibia of a knee joint in preparation for installing femoral and tibial knee components," '180 Patent col. 2, ll. 26-30; '583 Patent col. 2, ll. 32-36; "[T]he use of the flexion bolt in flexion and the extension bolt in extension, combined with the other components of the tensioning assembly, allow the tibia and femur to be distracted under a matching amount of tension in flexion and extension to ensure a better fit for the tibial and femoral knee replacement components throughout a range of flexion," '180 Patent col. 5, ll. 27-33; '583 Patent col. 5, ll. 36-42; "An assembly 10 of the present invention for facilitating preparation of a knee joint, including guiding positioning of cuts to a femur 11 and tibia 12 of the knee joint, for later mating with femoral and tibial knee replacement

components, is shown in the accompanying figures," '180 Patent col. 7, ll. 41-45; '583 Patent col. 7, ll. 50-54; "Defined on the outer cylindrical surface of the femoral mount 15 is a plurality of longitudinally extending gauge marks 21 that aid in positioning of the tibial and femoral components," '180 Patent col. 8, ll. 34-37; '583 Patent col. 8, ll. 43-46; "The use of the bolts 30 and 96 or 105 and the tibial angulation guide 74 or valgus adapter member 110 allow the tibia and femur to be distracted under a matching amount of torque in flexion and extension to ensure a better fit for the tibial and femoral knee replacement components throughout a range of flexion," '180 Patent col. 16, ll. 34-39; '583 Patent col. 16, ll. 41-46; an embodiment involving a "mini-trial femoral component" which "could be designed with cutting surfaces or slots for making the chamfer cuts and other finishing cuts," '180 Patent col. 16, l. 67, col. 17, ll. 1-2; '583 Patent col. 17, ll. 7-9; "The knee implant 200 generally comprises a femoral component 202 and a tibial component 204," '180 Patent col. 21, ll. 21-23 (citing figs. 49-50); '583 Patent col. 21, ll. 26-28 (same); and prior art involving a "femoral component 202 [with] a spherical condyle 206 on the medial side," '180 Patent col. 21, ll. 58-60; '583 Patent col. 21, ll. 61-63.

The language of other claims likewise describes the femoral component in structural terms. See generally '180 Patent; '583

Patent. The same is true of the other terms which the parties agree should be given essentially the same construction ("femoral element," "first member," and "elongated member").⁵ See Second Statement 1-2; see generally '180 Patent; '583 Patent.

For same reason that DePuy's argument from caselaw and extrinsic evidence failed with respect to tibial component, it fails with respect to femoral component, too. See supra Section III.A.1. (citing Zeroclick, 891 F.3d at 1008; Iancu, 933 F.3d at 1342; Samsung, 948 F.3d at 1354); see, e.g., Defs.' Br. 1 (highlighting "Femoral Components" in yellow and describing what is "commonly called a 'femoral component" (emphasis added)), 14 (explaining that the '180 Patent "use[s] 'femoral component' to refer to such a structure" and that "the specification actually calls those structures 'femoral components'" (emphasis added)); Pecht Decl., Ex. C, Pet. Inter Partes Review 37 C.F.R. § 42.100 6 (pointing to "Femoral component" in petition for inter partes review of different patent).

Accordingly, this Court rules that DePuy fails to rebut the presumption that femoral component is outside the scope of section 112, ¶ 6.

⁵ "The use of the terms 'first' and 'second' is a common patent-law convention to distinguish between repeated instances of an element or limitation." 3M Innovative Props. Co. v. Avery Dennison Corp., 350 F.3d 1365, 1371 (Fed. Cir. 2003).

2. Construction

This Court construes femoral component as "component configured to extend into a femur when seated in the femur or at a distal portion of the femur."

DePuy invites this Court to construe femoral component as "femoral intramedullary rod." Second Statement 1. In support, DePuy argues that the embodiments depict the femoral component as comprising only one structure, a femoral intramedullary rod. Defs.' Suppl. Br. 13. "[B]ut a patent claim term is not limited merely because the embodiments in the specification all contain a particular feature." See C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 865 (Fed. Cir. 2004). Here, claim language leads this Court to decline DePuy's invitation. See Phillips, 415 F.3d at 1315, 1323-27.

It is true that one independent claim of the '180 Patent recites "a femoral component comprising an intramedullary rod configured to be inserted into a femur." '180 Patent col. 24, ll. 10-27 (claim 15). Critically, however, another independent claim of the '180 Patent recites "a femoral component" that itself "is configured to extend into a femur when the femoral component is seated in the femur." Id. col. 24, ll. 53-67, col. 25, ll. 1-5 (claim 19). Thus, although the femoral component of independent claim 15 requires an intramedullary rod, the femoral component of independent claim 19 does not.

There is another flaw in DePuy's proposal. Some dependent claims indicate that the femoral component comprises a femoral intramedullary rod. See id. col. 25, ll. 6-10 (claim 20); '583 Patent col. 23, ll. 26-31 (claim 5), col. 23, ll. 32-37 (claim 6), col. 24, ll. 54-59 (claim 15), col. 24, ll. 60-64 (claim 16). The independent claims from which these claims stem, however, do not contain such a limitation. See '180 Patent col. 24, ll. 53-67, col. 25, ll. 1-5 (claim 19); '583 Patent col. 22, ll. 60-67, col. 23, ll. 1-7 (claim 1), col. 24, ll. 16-39 (claim 12). To adopt DePuy's proposal thus would disregard the maxim that "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." See Phillips, 415 F.3d at 1315.

With respect to the femoral component, the specifications teach the following: "A combination of a first assembly for guiding resection of a femur and tibia of a knee joint and a second assembly including femoral and tibial knee components. The combination of the first assembly and the second assembly provides optimal placement and positioning of the femoral and tibial knee components to achieve near-normal knee kinematics and tension," '180 Patent (Abstract); '583 Patent (Abstract); "Preservation of the ligamentous and other soft tissue structures around the knee can provide a reference point for

accurately positioning the tibial and femoral components of the knee implant, in particular when said structure is in tensed or otherwise loaded condition," '180 Patent col. 1, ll. 62-66; '583 Patent col. 2, ll. 1-5; "The present invention meets the above needs, and achieves other advantages, by providing an assembly for guiding resection of a femur and tibia of a knee joint in preparation for installing femoral and tibial knee components," '180 Patent col. 2, ll. 26-30; '583 Patent col. 2, ll. 32-36; "[T]he use of the flexion bolt in flexion and the extension bolt in extension, combined with the other components of the tensioning assembly, allow the tibia and femur to be distracted under a matching amount of tension in flexion and extension to ensure a better fit for the tibial and femoral knee replacement components throughout a range of flexion," '180 Patent col. 5, ll. 27-33; '583 Patent col. 5, ll. 36-42; "An assembly 10 of the present invention for facilitating preparation of a knee joint, including guiding positioning of cuts to a femur 11 and tibia 12 of the knee joint, for later mating with femoral and tibial knee replacement components, is shown in the accompanying figures," '180 Patent col. 7, ll. 41-45; '583 Patent col. 7, ll. 50-54; "Defined on the outer cylindrical surface of the femoral mount 15 is a plurality of longitudinally extending gauge marks 21 that aid in positioning of the tibial and femoral components," '180 Patent col. 8, ll. 34-37; '583 Patent col. 8, ll. 43-46;

"The use of the bolts 30 and 96 or 105 and the tibial angulation guide 74 or valgus adapter member 110 allow the tibia and femur to be distracted under a matching amount of torque in flexion and extension to ensure a better fit for the tibial and femoral knee replacement components throughout a range of flexion," '180 Patent col. 16, ll. 34-39; '583 Patent col. 16, ll. 41-46; in one embodiment, "The mini-trial femoral component could be designed with cutting surfaces or slots for making the chamfer cuts and other finishing cuts, thus eliminating the need for a chamfer cut block and L-plate 99 shown in FIGS. 30 and 31," '180 Patent col. 16, l. 67, col. 17, ll. 1-3; '583 Patent col. 17, ll. 7-10; "The knee implant 200 generally comprises a femoral component 202 and a tibial component 204," '180 Patent col. 21, ll. 21-23 (citing figs. 49-50); '583 Patent col. 21, ll. 26-28 (same); and prior art involving a "femoral component 202 [with] a spherical condyle 206 on the medial side," '180 Patent col. 21, ll. 58-60; '583 Patent col. 21, ll. 61-63.

This Court must read the claims in light of these teachings. See Phillips, 415 F.3d at 1323. In so doing, this Court construes femoral component as "component configured to extend into a femur when seated in the femur or at a distal portion of the femur."

C. "configured/configured to"

With respect to "configured/configured to," DePuy proposes "assembled," and Rasmussen proposes "designed to, adapted to, or manufactured to." Second Statement 2. This Court construes "configured/configured to" as "manufactured."

This Court rejects DePuy's proposal. "Assembled" is not a term of art; it is the simple past tense of "assemble," which means "to fit together various parts of so as to make into an operative whole." Webster's Third New Int'l Dictionary 130 (Philip Babcock Gove ed., 3d ed. 2002). Accordingly, under DePuy's construction, the subject of claims reciting the verb "configured" necessarily would require the fitting together of various parts. This finds support with respect to the "femoral component comprising an intramedullary rod configured to be inserted into a femur," see '180 Patent col. 24, ll. 10-13, but it finds no support with respect to the "femoral component configured to be seated at a distal portion of a femur," see id. col. 25, ll. 15-18. In the latter scenario, the femoral component could not be "assembled" because it consists of only one part.⁶

⁶ To the extent that DePuy suggests that all the claimed "parts must be assembled to 'comprise' a device or apparatus," see Defs.' Suppl. Resp. Claim Construction Br. 1, 18-19, ECF No. 86 (citing Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 528 (1972)), DePuy essentially asks this Court to determine whether, for example, the tibial component is "assembled" with

In its supplemental brief, Rasmussen argues that "the claims clearly and carefully delineate between being 'configured to' do something, and actually doing something." Pl.'s Suppl. Br. 5. For support, Rasmussen points to independent claim 9 of the '180 Patent, which recites "a threaded member that is configured to be coupled to the elongated member," '180 Patent col. 23, ll. 49-53 (emphasis added), and to dependent claim 12, which recites "the threaded member is coupled to the elongated member," id. col. 23, ll. 62-63 (emphasis added). It appears that Rasmussen suggests that the claims differentiate between parts which are "configured to" do something, i.e., parts which may do something, and parts which must do something. See Pl.'s Suppl. Br. 4-7. But Federal Circuit "cases distinguish between claims with language that recites capability, and those that recite configuration," ParkerVision, Inc. v. Qualcomm Inc., 903 F.3d 1354, 1361 (Fed. Cir. 2018), holding that "configured to" generally has a narrower meaning than "capable of" or "suitable for," Aspex Eyewear, Inc. v. Marchon Eyewear, Inc., 672 F.3d 1335, 1349 (Fed. Cir. 2012); see Radware Ltd. v. A10 Networks, Inc., Case Nos. C-13-2021 RMW, C-13-02024-RMW, 2014 WL 1572644, at *12 (N.D. Cal. Apr. 18, 2014) (stating that "configured to" is a "patent term of art" and noting that "courts have generally

the femoral component. This is a different question, and it is one on which this Court expresses no opinion.

interpreted 'configured to' more narrowly than simply 'capable of'); see also SIPCO, LLC v. Abb, Inc., Civil Action No. 11-CV-0048 LED-JDL, 2012 WL 3112302, at *11 (E.D. Tex. July 30, 2012) ("Interpreting 'configured to' as requiring only mere capability would eliminate any meaningful limits to the claims."), adopted sub nom. SIPCO, LLC v. Abb, Inc., NO. 11cv48 LED-JDL, 2012 WL 12842877 (E.D. Tex. Oct. 23, 2012).

Here, "configured/configured to" appears in all asserted claims and passim in the specifications. Second Statement 2; see generally '180 Patent; '583 Patent. A careful consideration of its many appearances leads this Court to conclude that the '180 Patent and '583 Patent use "configured/configured to" in a narrow sense, meaning "manufactured."

D. "femoral component comprising an intramedullary rod . . . with an opening"

DePuy proposes construing "femoral component comprising an intramedullary rod . . . with an opening" as "hollow femoral intramedullary rod." Second Statement 2. Rasmussen proposes "plain and ordinary meaning," though it fails to state what that plain and ordinary meaning is. See id. This Court rules that a "femoral component comprising an intramedullary rod . . . with an opening" need not be hollow, and it declines further to construe the term.

The parties' dispute raises the question whether the "femoral component comprising an intramedullary rod . . . with an opening" must be hollow. This Court answers that question in the negative. Even if DePuy were correct that "the femoral component of claim 15 is a femoral [intramedullary] rod with or without an opening in it, but if the opening is in the femoral component, then the femoral component is a hollow [intramedullary] rod," Defs.' Br. 16, its proposal would not follow. First, the opening is not necessarily in the femoral component; it could instead (or additionally) be in the tibial component. See '180 Patent col. 24, ll. 10-27 ("[A] femoral component comprising an intramedullary rod configured to be inserted into a femur . . . wherein a portion of the tensioning apparatus is configured to couple with an opening in at least one of the femoral component and the tibial component") (emphasis added)). Second, contrary to DePuy's antecedent-basis argument, see Defs.' Resp. 13, claim 15 indeed recites "an opening," but this opening need only be "in at least one of the femoral component and the tibial component," '180 Patent col. 24, ll. 10-27.

Against this backdrop, this Court declines further to construe "femoral component comprising an intramedullary rod . . . with an opening" because it has resolved the parties' dispute regarding the "hollowness" (vel non) of the term. See

O2 Micro, 521 F.3d at 1361. Read in context and alongside this Court's other constructions, "the plain and ordinary meaning of the disputed claim language is clear." See Summit 6, 802 F.3d at 1291. It suffices to rule, therefore, that no further construction is necessary. See Phillips, 415 F.3d at 1314 ("In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words."); Brown, 265 F.3d at 1352 (stating that terms which "are not technical terms of art . . . do not require elaborate interpretation").

Accordingly, this Court rules that a "femoral component comprising an intramedullary rod . . . with an opening" need not be hollow, and it declines further to construe the term.

E. "cannulated insert"

DePuy proposes construing "cannulated insert" as "hollow femoral intramedullary rod." Second Statement 2. Rasmussen proposes "plain and ordinary meaning," though it fails to state what that plain and ordinary meaning is. See id. This Court rules that a "cannulated insert" need not be hollow and need not be a femoral intramedullary rod, and it declines further to construe the term.

Cannulated insert appears only once, in claim 18 of the '180 Patent. See '180 Patent col. 24, ll. 46-52. Claim 18 recites that the cannulated insert (1) "defines the opening," (2) "receives the intramedullary rod," and (3) "is configured to be inserted into the femur" Id. None of these limitations require the cannulated insert to be "hollow."

First, the only other appearances of "defines" or "defining" an opening refer to the femoral component. Id. col. 22, ll. 57-59 (claim 1), col. 23, ll. 38-40 (claim 9). There the femoral component defines an opening, but the '180 Patent nowhere describes it as hollow, and this Court already has rejected DePuy's suggestion that the "femoral component comprising an intramedullary rod . . . with an opening" must be hollow. See supra Section III.D. Moreover, the verb "defines" in this context means "to mark the limits of" or "determine with precision or exhibit clearly the boundaries of" the opening, which does not require "hollowness," an adjective denoting emptiness. See Webster's Third New Int'l Dictionary 592, 1080 (defining "hollow" as "having an empty space or cavity within").

Second, a person of ordinary skill in the art would understand "receives" as "take[s] in" Id. 1894. To "take in" likewise does not require hollowness; interlocking puzzle pieces, for instance, take each other in, but they are not hollow.

Finally, a person of ordinary skill in the art would understand "configured to be inserted" as "manufactured to be inserted," see infra Section III.C., which is to say nothing about the hollowness of the cannulated insert. This Court sees no other intrinsic or extrinsic basis requiring the cannulated insert to be hollow.

This Court also rejects DePuy's argument that the "insert" necessarily is a "femoral intramedullary rod" because claim 18 distinguishes between the "cannulated insert that defines the opening" and the "intramedullary rod" that the cannulated insert receives. See '180 Patent col. 24, ll. 46-52.

Against this backdrop, this Court declines further to construe "cannulated insert" because it has resolved the parties' dispute regarding its "hollowness" and nature as a "femoral intramedullary rod" (vel non). See O2 Micro, 521 F.3d at 1361. Read in context and alongside this Court's other constructions, "the plain and ordinary meaning of the disputed claim language is clear." See Summit 6, 802 F.3d at 1291. It suffices to rule, therefore, that no further construction is necessary. See Phillips, 415 F.3d at 1314; Brown, 265 F.3d at 1352.

Accordingly, this Court rules that a "cannulated insert" need not be hollow and need not be a femoral intramedullary rod, and it declines further to construe the term.

F. "tensioning apparatus" and "adjustable component"

DePuy argues that section 112, ¶ 6 applies to "tensioning apparatus" and "adjustable component." First Statement A-10 to A-15. DePuy further states that it "does not have constructions to offer for 'tensioning apparatus' and 'adjustable component' that are not means-plus-function constructions." Defs.' Suppl. Br. 19. Rasmussen responds that section 112, ¶ 6 does not apply to these terms, First Statement A-10 to A-15, and proposes "plain and ordinary meaning," Second Statement 2-4, though it fails to state what that plain and ordinary meaning is. This Court rules that section 112, ¶ 6 does not apply, and it declines further to construe these terms.

1. Means-Plus-Function

DePuy fails to rebut the presumption that "tensioning apparatus" and "adjustable component" are outside the scope of section 112, ¶ 6. The specifications of the '180 Patent and '583 Patent make no mention of these terms, but the relevant claim language recites sufficient structure. See generally '180 Patent; '583 Patent.

With respect to "tensioning apparatus," which appears only in the '180 Patent, independent claim 1 requires the tensioning apparatus to (1) "couple[] to both the femoral component and the tibial component" and (2) be "configured to be selectively actuated to vary a distance between the femoral component and

the tibial component to apply a desired ligamentous tension to the knee joint.” See ‘180 Patent col. 22, ll. 65-67, col. 23, ll. 1-3. Dependent claims 2, 3, 4, 7, and 8 likewise recite structure. See id. col. 23, ll. 4-9 (claim 2), col. 23, ll. 10-14 (claim 3), col. 23, ll. 15-18 (claim 4), col. 23, ll. 24-28 (claim 7), col. 23, ll. 29-37 (claim 8).

Independent claim 15 requires the tensioning apparatus to (1) be “configured to be interposed between the femoral component and the tibial component” and (2) be “configured to be actuated to move the femoral component and the tibial component with respect to each other,” and “a portion of the tensioning apparatus” to be “configured to couple with an opening in at least one of the femoral component and the tibial component” Id. col. 24, ll. 10-27. Dependent claims 16, 17, and 18 likewise recite structure. See id. col. 24, ll. 28-33 (claim 16), col. 24, ll. 34-45 (claim 17), col. 24, ll. 46-52 (claim 18).

Independent claim 19 requires the tensioning apparatus to (1) “couple[] to both the femoral component and the tibial component,” (2) be “configured to be selectively actuated to vary a distance between the femoral component and the tibial component to apply a desired ligamentous tension to the knee joint,” and (3) “couple[] to the femoral component such that a portion of the femoral component is configured to be rotatable

with respect to a portion of the tensioning apparatus to allow for adjustment of a varus-valgus alignment between the femur and the tibia when the assembly is seated in the knee joint.” Id. col. 24, ll. 53-67, col. 25, ll. 1-5.

Independent claim 22 requires the tensioning apparatus to (1) “couple[] to the femoral component and the tibial component” and (2) be “configured to be actuated to vary a distance between a portion of the femoral component and a portion of the tibial component,” and “a portion of the tensioning apparatus” to “pivotally couple[] to the femoral component such the apparatus provides for rotational movement between the tensioning apparatus and the femoral component to allow for adjustment of a varus-valgus angulation between the femur and the tibia.” Id. col. 25, ll. 15-21, col. 26, ll. 1-10. Dependent claim 24 likewise recites structure. See id. col. 26, ll. 17-21.

With respect to “adjustable component,” which appears only in the ‘583 Patent, independent claim 1 requires the adjustable component to be “configured to couple the first member with the second member such that the second member is rotatable about a longitudinal axis of the first member when a position of the first member is constant with respect to the femur to allow for adjustment of an angle between the tibia and the femur when the apparatus is seated in the knee joint.” ‘583 Patent col. 22, ll. 60-67, col. 23, ll. 1-7. Dependent claim 3 and 5 likewise

recite structure. See id. col. 23, ll. 14-21 (claim 3), col. 23, ll. 26-31 (claim 5).

Independent claim 7 requires the adjustable component to “connect[] the elongated member with the tibial contact member such that the tibial contact member is rotatable about a longitudinal axis of the elongated member when the apparatus is seated in the knee joint, when the elongated member is fixed in position with respect to the femur, and when the knee joint is in a flexed position.” Id. col. 23, ll. 38-51. Dependent claims 8 and 11 likewise recite structure. See id. col. 23, ll. 52-57 (claim 8), col. 24, ll. 4-15 (claim 11).

As they did with respect to “tibial component” and “femoral component,” the parties disagree about the import of decisions involving similar (but not identical) claim terms in other patents. Compare Pl.’s Br. 17-18 (citing DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 469 F.3d 1005, 1023-24 (Fed. Cir. 2006) (construing “compression member”); Medtronic, Inc. v. Edwards Lifesciences Corp., Civil No. 11-1650 (JNE/JSM), 2013 WL 2147909, at *9-10 (D. Minn. May 16, 2013) (construing “tensioning component”); Boston Sci. Corp. v. Cook Group Inc., Civil Action No. 15-980-LPS-CJB, 2017 WL 1364205, at *1-5 (D. Del. Apr. 12, 2017) (construing “tension member”)), with Defs.’ Resp. 17-18 (distinguishing decisions). There, as here, in attempting to distinguish Rasmussen’s cited decisions, DePuy

itself recites the reason that it fails to rebut the presumption: "the rest of the claim[s] provide[] more than purely functional language and provide[] sufficient structure to avoid the application of section 112, ¶ 6.'" See Defs.' Resp. 18 (quoting Medtronic, 2013 WL 2147909, at *10).

2. Construction

DePuy "does not have constructions to offer for 'tensioning apparatus' and 'adjustable component' that are not means-plus-function constructions." Defs.' Suppl. Br. 19. Rasmussen proposes "plain and ordinary meaning," though it fails to state what that plain and ordinary meaning is. See Second Statement 2-4.

Against this backdrop, the Court declines further to construe "tensioning apparatus" and "adjustable component" because it has resolved the parties' dispute regarding the applicability of section 112, ¶ 6 (vel non). See O2 Micro, 521 F.3d at 1361. Read in context and alongside this Court's other constructions, "the plain and ordinary meaning of the disputed claim language is clear." See Summit 6, 802 F.3d at 1291. It suffices to rule, therefore, that no further construction is necessary. See Phillips, 415 F.3d at 1314; Brown, 265 F.3d at 1352.

Accordingly, this Court rules that section 112, ¶ 6 does not apply, and it declines further to construe these terms.

G. "threaded member"

DePuy proposes construing "threaded member" as "bolt with a head and an externally threaded shaft." Second Statement 5. Rasmussen proposes "plain and ordinary meaning," though it fails to state what that plain and ordinary meaning is. See id. This Court construes the term as "member with internal or external threads."

This Court rejects DePuy's proposal for two reasons. "Threaded member" appears only in the '180 Patent. See generally '180 Patent. First, it is true that claim 11 of the '180 Patent recites that a "threaded object" may "threadingly receive[] the threaded member," meaning that the threaded member may have an externally threaded shaft. See id. col. 23, ll. 57-61. Claim 11, however, depends from independent claim 9, which does not indicate whether the threads are internal or external to the member. See id. col. 23, ll. 38-53. This Court therefore must give effect to the "presumption that the limitation in question," here the external threading recited in claim 11, "is not present in the independent claim," claim 9. See Phillips, 415 F.3d at 1315.

Second, DePuy responds that "[c]laim 9's silence as to whether the 'threaded member' is externally or internally threaded cannot broaden the scope of the term beyond the only construction supported by the specification." Defs.' Resp. 22

(citing Intellectual Ventures I LLC v. Motorola Mobility LLC, 870 F.3d 1320, 1326 (Fed. Cir. 2017)). This response misses the mark because the specification of the '180 Patent teaches multiple embodiments of both externally threaded structures (including bolts 30, 96, 105, 130, and 120) and internally threaded structures (including threaded opening 116 into threaded barrel 115, threaded opening 29 extending into tibial mount 23, and threaded opening 129 extending into femoral mount 150). See '180 Patent figs. 4-7, 9-15, 19-29, 32-40, 43-48, col. 9, ll. 20-39, col. 12, ll. 60-65, col. 15, ll. 50-54, col. 17, ll. 17-27, col. 17, ll. 33-44. This Court therefore cannot conclude that a threaded member necessarily has an externally threaded shaft. See Phillips, 415 F.3d at 1323 (cautioning against "importing limitations from the specification into the claims"). This Court's construction reflects that the member must be threaded, either internally or externally.

This Court rejects the remainder of DePuy's proposal ("bolt with a head") because there is no intrinsic or extrinsic basis to limit a threaded member to a "bolt," let alone a "bolt with a head." See generally '180 Patent; '583 Patent.

Accordingly, this Court construes "threaded member" as "member with internal or external threads."

H. "coupl[e/es/ed/ing]"

DePuy proposes construing "coupl[e/es/ed/ing]" as "directly connect[s/ed/ing]." Second Statement 5. Rasmussen proposes "plain and ordinary meaning, where, for purposes of clarification, the term includes direct and/or indirect coupling." Id. This Court construes the term as "connect[s/ed/ing] directly or indirectly."

The parties' dispute raises the question whether "coupling" means "directly connecting" or instead means "directly or indirectly connecting." There is apparently no dispute that to "couple" means to "connect." See Pl.'s Br. 23 ("As an initial matter, there is no apparent dispute between the parties that 'couple' is synonymous with 'connect.'" (citing Kete Decl., Ex. G, Couple, The American Heritage Dictionary of the English Language 419 (4th ed. 2006), ECF No. 44-7 (defining "couple" as "[t]o link together; connect"); id. Ex. J, Couple, Webster's College Dictionary 284 (2005), ECF No. 44-10 (defining "couple" as "to join; connect" and "to join or associate by means of a coupler"); id. Ex. K, Couple, Collins English Dictionary 385-386 (7th ed. 2005), ECF No. 44-11 (defining "couple" as "to connect (two things) together or to connect (one thing) to (another)")); see Defs.' Br. 23 ("The dispute over these terms is whether they require a direct connection.")).

There is no basis to conclude that coupling means only directly connecting. Most appearances of this disputed term indicate nothing at all about whether the structures involved are directly or indirectly connected. Claim 12 of the '583 Patent, for instance, recites that "the elongated member and the tibial contact member are configured to couple together," but it does not specify either a direct or indirect connection. See '583 Patent col. 24, ll. 33-34.

Other claims contemplate indirect coupling, though they do not use such precise language. Claim 18 of the '180 Patent, for example, recites that "the tensioning apparatus is configured to couple with the opening by coupling with the intramedullary rod, which, in turn, couples with the opening." '180 Patent col. 24, ll. 49-52. The specifications likewise teach that "[e]mbodiments of the present assembly can include tibial and femoral [intramedullary] rods which are connected through a torque bolt," id. col. 2, ll. 32-34 (emphasis added); '583 Patent col. 2, ll. 38-40 (same), and that "[t]he tibial angulation guide is configured to attach to the tibial [intramedullary] rod through the cannulated extension bolt which is, in turn, coupled to the tibial [intramedullary] rod," '180 Patent col. 4, ll. 29-32 (emphasis added); '583 Patent col. 4, ll. 36-39 (same).

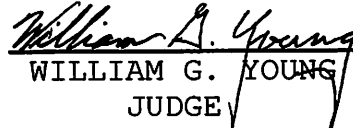
This Court's construction is in accord with Federal Circuit and other well-reasoned precedent. See, e.g., Bradford Co. v. Conteyor N. Am., Inc., 603 F.3d 1262, 1270-71 (Fed. Cir. 2010) (holding that "coupled to . . . should be construed broadly so as to allow an indirect attachment" (quotations omitted)); Genentech, Inc. v. Chiron Corp., 112 F.3d 495, 501 (Fed. Cir. 1997) ("To be joined or connected does not necessitate a direct joining or connection."); Silicon Graphics, Inc. v. n Vidia Corp., 58 F. Supp. 2d 331, 345-47 (D. Del. 1999) (construing "coupled" as "coupled or connected, directly or indirectly"); SwimWays Corp. v. Zuru, LLC, No. 13cv334, 2014 WL 934447, at *7-8 (E.D. Va. Mar. 10, 2014) (construing "coupled to said torso" as "connected to said torso, either directly or indirectly"); Eppendorf AG v. Nanosphere Inc., Civil Action No. 09-0504, 2010 WL 2757097, at *7-8 (D. Del. July 12, 2010) (construing "coupled to" as "encompass[ing] indirect linking").

Accordingly, this Court construes "coupl[e/es/ed/ing]" as "connect[s/ed/ing] directly or indirectly."

IV. CONCLUSION

This Court sets forth its constructions below.

SO ORDERED.


WILLIAM G. YOUNG
JUDGE
of the
UNITED STATES⁷

⁷ This is how my predecessor, Peleg Sprague (D. Mass. 1841-1865), would sign official documents. Now that I'm a Senior District Judge I adopt this format in honor of all the judicial colleagues, state and federal, with whom I have had the privilege to serve over the past 43 years.

Term	Patent Owner's Construction	Accused Infringers' Construction	Court's Construction
1. "tibial component" (‘180 patent, claims 1, 9, 15)	member, component, or structural unit for positioning at a tibia	tibial plate with central opening	35 U.S.C. § 112, ¶ 6 does not apply. "component configured to be seated on, at, or against a portion or proximal portion of a tibia"
2. "second member" (‘583 patent, claims 1 and 3)			
3. "tibial contact member" (‘583 patent, claims 7 and 12)			
4. "femoral component" (‘180 patent, claims 1, 6 and 9)	member, component, or structural unit for positioning at a femur	femoral intramedullary rod	35 U.S.C. § 112, ¶ 6 does not apply. "component configured to extend into a femur when seated in the femur or at a distal portion of the femur"
5. "femoral element" (‘583 patent, claims 2 and 12)			
6. "first member" (‘583 patent, claim 1)			
7. "elongated member" (‘583 patent, claim 7)	elongated member, component, or structural unit for positioning at a femur	femoral intramedullary rod	35 U.S.C. § 112, ¶ 6 does not apply. "component configured to extend into a femur when seated in the femur or at a distal portion of the femur"
8. "configured" (all asserted claims)	designed to, adapted to, or manufactured to	assembled	"manufactured"

Term	Patent Owner's Construction	Accused Infringers' Construction	Court's Construction
9. "femoral component comprising an intramedullary rod . . . with an opening" (‘180 patent, claims 15 and 18)	plain and ordinary meaning	hollow femoral intramedullary rod	Need not be hollow. No further construction necessary.
10. "cannulated insert" (‘180 patent, claim 18)	plain and ordinary meaning	hollow femoral intramedullary rod	Need not be hollow. Need not be a femoral intramedullary rod. No further construction necessary.
11. "tensioning apparatus that couples to both the femoral component and the tibial component and that is configured to be selectively actuated to vary a distance between the femoral component and the tibial component to apply a desired ligamentous tension to the knee joint"	plain and ordinary meaning	§ 112, ¶ 6 Functions: (1) coupling to both the femoral component and the tibial component; and (2) varying a distance between the femoral component and the tibial component Structures: (1) flexion bolt 30, femoral mount 15, and a torque wrench; (2) extension bolt 96, femoral mount 15, angulation adapter 74, and a torque wrench;	35 U.S.C. § 112, ¶ 6 does not apply. No further construction necessary.

Term	Patent Owner's Construction	Accused Infringers' Construction	Court's Construction
('180 patent, claim 1)		(3) hex head bolt 105, adapter member 110, and a torque wrench; (4) flexion bolt 120, threaded barrel 115, bushing 125, and torque wrench 140; (5) extension bolt 130 and torque wrench 140; and (6) threaded barrel 115, ratcheting device 142, and bushing 125	
<p>12. “tensioning apparatus configured to be interposed between the femoral component and the tibial component and configured to be actuated to move the femoral component and the tibial component with respect to each other”</p> <p>('180 patent, claim 15)</p>	plain and ordinary meaning	<p>§ 112, ¶ 6</p> <p>Functions: (1) interposing between the femoral component and the tibial component; and (2) moving the femoral component and the tibial component with respect to each other</p> <p>Structures: (1) flexion bolt 30, femoral mount 15, and a torque wrench; (2) extension bolt 96, femoral mount 15, angulation adapter 74, and a torque wrench; (3) hex head bolt 105, adapter member 110, and a torque wrench; (4) flexion bolt 120, threaded barrel 115, bushing 125, and torque wrench 140; (5) extension bolt 130 and torque wrench 140; and (6) threaded barrel 115, ratcheting device 142, and bushing 125</p>	<p>35 U.S.C. § 112, ¶ 6 does not apply.</p> <p>No further construction necessary.</p>

Term	Patent Owner's Construction	Accused Infringers' Construction	Court's Construction
<p>13. “adjustable component that is configured to couple the first member with the second member such that the second member is rotatable about a longitudinal axis of the first member”</p> <p>(‘583 patent, claim 1)</p>	<p>plain and ordinary meaning</p>	<p>§ 112, ¶ 6</p> <p>Functions: coupling the first member with the second member such that the second member is rotatable about a longitudinal axis of the first member</p> <p>Structures: (1) flexion bolt 30, femoral mount 15 (Fig. 33), and a torque wrench; (2) flexion bolt 120, threaded barrel 115, bushing 125, and torque wrench 140; (3) threaded barrel 115, ratcheting device 142, and bushing 125</p>	<p>35 U.S.C. § 112, ¶ 6 does not apply.</p> <p>No further construction necessary.</p>
<p>14. “adjustable component that connects the elongated member with the tibial contact member such that the tibial contact member is rotatable about a longitudinal axis of the elongated member”</p> <p>(‘583 patent, claim 7)</p>	<p>plain and ordinary meaning</p>	<p>§ 112, ¶ 6</p> <p>Functions: connecting the elongated member with the tibial contact member such that the tibial contact member is rotatable about a longitudinal axis of the elongated member</p> <p>Structures: (1) flexion bolt 30, femoral mount 15, and a torque wrench; (2) flexion bolt 120, threaded barrel 115, bushing 125, and torque wrench 140; (3) threaded barrel 115, ratcheting device 142, and bushing 125</p>	<p>35 U.S.C. § 112, ¶ 6 does not apply.</p> <p>No further construction necessary.</p>

Term	Patent Owner's Construction	Accused Infringers' Construction	Court's Construction
15. threaded member (‘180 patent, claims 9 and 12)	plain and ordinary meaning	bolt with a head and an externally threaded shaft	“member with internal or external threads”
16. couple[e/es/ed/ing] (‘180 patent, claims 1, 9, 12, 15, 18; ‘583 patent, claims 1, 12)	plain and ordinary meaning, where, for purposes of clarification, the term includes direct and/or indirect coupling	directly connect/s/ed/ing	“connect[s/ed/ing] directly or indirectly”